

REMARKS

This is responsive to the Office Action mailed on August 17, 2004. In that Office Action, the Examiner rejected claims 13-19, 21 and 22, objected to claim 20 and allowed claim 23. With this Amendment, independent claims 13 and 17 are hereby amended and new claim 25 is added. The application continues to include claims 13-23 and 25.

In the Office Action, the Examiner rejected claim 13 under 35 U.S.C. § 102(b) as being anticipated by the Crawley et al. U.S. Patent No. 5,397,628. The Examiner alleged that Crawley et al. discloses applicant's claimed invention, and specifically, that Crawley et al. discloses a method for a support that includes a laminated air permeable cellular rubber body protection material with a porous and expanded PTFE layer. The Examiner then alleges that Crawley et al. discloses placement of the Crawley et al. material on selected pressure regions of high loads when the load is carried between the object and the human body support and applying selected individual patches interfaced between the object and the skin in the selected regions. The Examiner specifically points to Example 3 of Crawley et al. for adhesively securing such a patch in the selected area to one of the object and the tissue.

The Examiner also characterizes the preamble language of the claim as stating a purpose or intended use of the invention, and that such is not a limitation or merely an indication of a possible use of the environment in which the invention operates. The Examiner also states that the Summary of the Invention and the Examples of Crawley et al. make it clear that the protective material is used to decrease the amount of friction between the user's body and an object.

Applicant respectfully disagrees with the Examiner's characterization of Crawley et al., especially, in view of the amendments to the claims.

The present invention includes a patch which is placed on a portion of the human body or on an object adjacent to that portion of the human body to minimize trauma on that portion of the human body due to friction between the portion of the human body and the object supporting that portion of the human body. The Crawley et al. patent neither teaches nor suggests such an invention.

The Crawley et al. patent describes a body protection material that includes a laminate of an outer layer of the cellular rubber and an inner layer of porous expanded polytetrafluoroethylene (PTFE). As stated in the Summary of Crawley, the PTFE offers a substantial increase in wearing comfort of cellular rubber wetsuits and orthopedic braces. There is absolutely no disclosure of minimizing trauma due to friction between an object that supports a portion of the human body and that human portion of the human body. As the Field of the Invention and the specification of Crawley indicates, the Crawley invention relates to such a PTFE layer on a wetsuit and orthopedic braces. Cellular rubber in wetsuits and orthopedic braces trap perspiration between the cellular rubber and the skin causing a sticky, clammy and itching sensation that adds to the feeling of discomfort. (Crawley et al. column 1, lines 43-46). The section of Crawley et al. that the Examiner refers to (column 2, lines 38-45), discloses that the PTFE adds a high degree of lubricity to the inner surface of the body protection material. This lubricity allows for a small amount of relative movement between the material and the skin. This results in significant increase in wearing comfort and because of the increased lubricity wetsuits and orthopedic braces are much easier to put on and remove. There is absolutely no suggestion or disclosure of trauma prevention due to friction.

There is absolutely no disclosure of placing a patch on either the portion of the human body in which trauma is to be minimized due to friction between that portion of the human body and the object which it supports or placement of the patch of the present invention on the object that supports the human body adjacent to the portion of the human body on which trauma due to friction is to be minimized. The Crawley et al. patent simply discloses placing a layer of PTFE on the inner surface of a wetsuit or the inner surface of an orthopedic brace to add comfort and ease in removal of the wetsuit or brace.

Claim 13 has been amended to specifically state that the individual patch is "independent of the support object or any other object adjacent the tissue". As now defined in claim 13, the patch is unattached to the support object or any other object adjacent to tissue. The support for this amendment is clearly found in the specification throughout, and in the drawings since the patch of the present invention is shown independent or unattached to the support object

until it is adhesively secured thereto. This provides the user with the ability to place the patch at a location independent of the support object. This is clearly not shown in the Crawley et al. patent since the entire inner surface of the wetsuit and the orthopedic brace is coated with PTFE. There is no suggestion or teaching of an independent patch.

Therefore, the Crawley et al. patent cannot anticipate independent claim 13 since it does not contain each and every element of independent claim 13.

Independent claim 13 has also been amended to make more clear that the patch can be placed on either the object or the tissue.

Next, the Examiner rejected claims 14 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Crawley et al. The Examiner states that Crawley et al. fails to teach a shoe being the object and the region being the metatarsal-phalangeal joint region and the joint region support being calcaneous. However, as stated above, Crawley et al. neither teaches nor suggests the positioning of individual patches on either a tissue on which trauma is to be minimized due to friction or the support object adjacent to that tissue. Crawley et al. simply teaches placing a PTFE layer on an inside surface of a wetsuit or an orthopedic brace. There is no suggestion in Crawley et al. of minimizing trauma due to friction. The placement of the PTFE is simply for comfort and for ease of taking off the wetsuit or taking off the orthopedic brace.

Next, the Examiner rejects claims 13, 16, 17, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over the Pollack U.S. Patent No. 3,732,578 in view of Crawley et al. The Examiner alleges that with regard to claims 13 and 16, Pollack discloses a management method for a prosthetic device having a socket for receiving a portion of a limb to be supported and an exposed surface loading against the limb having support bones, tissue around the support bones and skin on an outer side of the tissue. The Examiner further states that Pollack fails to teach a plurality of pads and that the pads have an exposed surface of low friction. Furthermore, the Examiner points to column 6, lines 14-35 of Crawley et al. alleging that it teaches the use of adhesive to apply the low friction material to a knee brace, thereby providing a teaching for adhesively attaching low friction material to an object.

However, neither the Crawley et al. nor the Pollack patents teach or suggest the invention as now defined in amended claims 13 and 17. Although column 6, lines 13-45 of the Crawley et al. patent teach to secure a sheet of polyurethane coated porous expanded PTFE film to a padding of 0.100 inch thick open cell foam rubber, and then adhesively securing that laminate to a Stromgren knee brace (which is a neoprene knee brace), there is no teaching or suggestion of the patch as now defined in independent claims 13 and 17. As discussed above, claim 13 defines the individual patch as unattached to the support object or any other object adjacent to tissue. The reason for this is then the individual patch may be placed on the portion of the support object or on the tissue to be protected at a selected area. Similarly, claim 17 which is directed to a method of reducing trauma also defines the patch as being independent of the object or any other object adjacent to the tissue. Again, the reason for this is so that the individual may place the patch in the region where trauma is to be minimized. There is absolutely no teaching in the Pollack patent of reducing trauma that results due to friction. The same holds for Crawley et al. If the Examiner believes otherwise, it is requested that the Examiner specifically point to column and line number.

In view of the above, it is respectfully requested that the rejection of claims 13, 16, 17, 18 and 19 be withdrawn.

With regard to the Examiner's comments on claim 21 that Pollack discloses the step of adding an additional pad after the tissue has been loaded against the object for a period of time, it is not understood how Pollack in column 3, lines 8-12 discloses providing an additional pad to reduce trauma caused by friction. In column 3, lines 8-12, Pollack specifically states "Primarily for purposes of cushioning and comfort, but also as a means of checking for uncorrected areas of differential pressure." There is absolutely no suggestion of a method of reducing trauma relating to friction using the low friction patches of the present invention.

With regard to the Examiner's comments of claim 22, that "Crawley et al. does not disclose that the adhesive is permanent; therefore the patches are inherently removable." - these comments are not understood. Taking this logic, since Crawley et al. does not describe the adhesive as being permanent or non-permanent, then Crawley et al. describes both types of

adhesive, permanent and non-permanent. However, this type of logic would then make nothing patentable since the absence of a disclosure is then in essence the disclosure. Furthermore, one can only come to this conclusion (of removable) only after reviewing applicant's own disclosure which says the adhesive is such that the patch is removable. Using applicant's disclosure is not permissible.


In addition, new claim 25 has been added. New claim 25 includes three elements. It includes the portion of the human body for trauma minimization due to friction, a portion of the human body support object that may cause the trauma due to frictional engagement between the portion of the human body and a patch that is positioned on either the portion of the human body or the portion of the human body support object to reduce trauma due to friction. The patch is defined as not being part of the human body support object or any other object adjacent to the portion of the human body. It is believed that claim 25 is also patentable in view of the references that have been cited.

In view of the above, it is respectfully requested that claims 13-22 be reconsidered and allowed, along with allowance of new independent claim 25.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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